occupation of real property, [the Supreme] Court has invariably found a taking."¹²⁵ "A permanent physical occupation authorized by government is a taking without regard to the public interests that it may serve."¹²⁶

In *Bell Atlantic v. FCC*, ¹²⁷ the court invalidated a Commission policy that required certain telephone companies to permit competitors to physically collocate transmission facilities in telephone company central offices because the statute did not expressly authorize the agency to mandate collocation. ¹²⁸ The court found statutory construction that would permit an agency to mandate "physical co-location . . . must fall unless any fair reading" of the statute would "discern the requisite authority." ¹²⁹ Consequently, statutes will not be interpreted to imply such authority where they are not explicit. ¹³⁰ Indeed, takings authority may be implied only as a matter of necessity where "the grant [of authority] itself would be defeated unless [takings] power were implied." ¹¹³¹ Obviously, the Commission's prior interpretation of its collocation authority under

¹²⁵ Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 427 (1982) (footnote omitted) (mandated installation of a coaxial cable is an unconstitutional taking).

¹²⁶ *Id.* at 426.

¹²⁷ 24 F.3d 1441 (D.C. Cir. 1994).

¹²⁸ *Id.*, 24 F.3d at 1447; see also *GTE Northwest Inc. v. PUC of Oregon*, 900 P.2d 495 (Ore. 1995), *cert. denied*, 517 U.S. 1155 (1996).

¹²⁹ Bell Atlantic, 24 F.3d at 1446.

¹³⁰ "Within the bounds of fair interpretation, statutes will be construed to defeat administrative orders that raise substantial constitutional questions." *Id.* at 1445.

¹³¹ Bell Atlantic, 24 F.3d at 1447; Western Union Tel. Co. v. Pennsylvania R.R., 120 F. 362, 373 (C.C.W.D.Pa.), aff'd, 123 F. 33 (3d Cir. 1903), aff'd, 195 U.S. 540 (1904).

§ 251(c)(6) demonstrates that it is a "fair reading" of the statute to exclude switching equipment; the Commission lacks authority to expand the scope of this statutory standard. Thus, regardless of any assessment of the public interest benefits of a collocation policy for switching equipment, imposition of any such regulatory obligation would require express legislative authorization which is lacking here.

- C. Any Modifications To The Rules Governing Equipment Collocation Should Neither Unfairly Burden ILECs Nor Jeopardize Network Integrity. (¶¶ 129-135)
 - 1. The Commission should not differentiate between collocation of the equipment of CLECs and ILEC-affiliates. (¶¶ 129-131)

GTE agrees with the Commission's tentative conclusion that an "incumbent must allow competitive LECs to collocate equipment to the same extent as the incumbent allows its advanced services affiliate to collocate equipment." For example, if an ILEC were to allow its affiliate to collocate switching equipment (even though it is not compelled to do so by § 251(c)(6)), it should afford equivalent treatment to other CLECs. Similar treatment of CLECs and ILEC affiliates in this instance would be consistent with the statutory requirement that ILECs provide collocation on non-discriminatory terms and conditions.

Thus, such specific collocation authority cannot be derived from the general authority provided for by §§ 4(i) or 202.

¹³³ NPRM, ¶ 129. The sole exception to this requirement is for equipment that is grandfathered as a result of the imposition of these new rules on ILECs that have already begun to invest in xDSL. See Section ILF supra.

Based upon this same principle, the Commission should decline to adopt its tentative conclusion that an "advanced services affiliate should not be permitted to collocate its switching equipment if there is only enough room at the central office for one carrier to collocate such equipment." To the extent that an ILEC voluntarily permits collocation of switching equipment, it should not be precluded from allowing its affiliate to collocate simply because the affiliate is the only requesting provider. A critical premise underlying any separate affiliate requirement is that the Commission's rules must treat an ILEC's affiliate no differently than other competitive providers so long as the required degree of separation is maintained by the ILEC and its affiliate. Here, there is no reason to depart from the Commission's existing "first come-first served" rule with respect to the collocation of equipment. This rule makes it easy to detect and address any concerns of discriminatory treatment.

2. Collocated equipment must not jeopardize the safety and reliability of ILEC networks. (¶¶ 134-135)

GTE agrees with the Commission's tentative conclusion that ILECs "may require that all equipment that a new entrant places on its premises meet safety requirements to avoid endangering other equipment and the incumbent LECs' networks." With the integrated operation of many different types of equipment in current telecommunications networks, safety and reliability standards are becoming increasingly important because it is more difficult to accurately assess how the failure of

¹³⁴ NPRM, ¶ 131.

¹³⁵ *Id.*, ¶ 134.

any one individual component may adversely affect the overall safety and reliability of the entire network. To ensure high quality and reliable service to all its customers, GTE has invested substantial resources to meet Bellcore's Network Equipment and Building specifications. GTE also participates on the Commission's Network Reliability and Interoperability Council.

The Commission's collocation rules should not compromise these efforts by allowing CLECs to deploy equipment that threatens ILECs' ability to maintain both network safety and reliability. Compliance with NEBS level 3 standards for all collocated equipment is the most dependable and accurate way to maintain existing safety and reliability standards and practices. These standards are the product of extensive engineering review and are openly available to all equipment manufacturers and service providers. However, where it can be reasonably determined that collocation of particular equipment will not impact the safety or reliability of an ILEC's network, GTE would not oppose allowing a CLEC to deploy such equipment provided that it meets NEBS level 1 and/or level 2 standards and is enclosed in an earthquake zone 4-compliant cabinet.

- D. Space Allocation Procedures Must Continue To Promote The Efficient Use Of Central Office Facilities And Address ILECs' Legitimate Security Concerns. (¶¶ 137-150)
 - 1. GTE supports incorporating additional flexibility into the collocation rules in several specific areas. (¶¶ 137-142)

Recognizing that space in ILEC premises is limited, the Commission proposes to require ILECs to offer "alternative collocation arrangements" that "minimize the space

needed by each competing provider in order to promote the deployment of advanced services to all Americans."¹³⁶ These options include the following: (1) "shared" collocation cages within which "multiple competing providers' equipment could be either openly accessible or locked within a secure cabinet;" (2) the option to request collocation cages of any size; and (3) so-called "cageless" collocation that "does not require the use of collocation cages."¹³⁷

As noted above, GTE is negotiating with CLECs to offer "shared" collocation arrangements where ILEC equipment is separated from areas used for CLEC equipment. Within areas designated for CLEC equipment, providers are permitted to lease space and may either secure their equipment with a locked cabinet or leave their equipment openly accessible. These arrangements give CLECs flexibility to physically collocate equipment, while allowing the local telephone operating company to secure and control access to its network equipment. In addition, because physical separation between the ILEC and CLEC is maintained and LECs can continue to monitor security through existing procedures, these arrangements minimize costs associated with providing collocation. Accordingly, GTE would support the incorporation of these types of arrangements into the Commission's collocation rules.

In addition, GTE recognizes that some CLECs may need additional flexibility to request collocation space in amounts that are smaller than present standard requirements. To this end, GTE would support reducing the minimum collocation space

¹³⁶ NPRM, ¶ 137.

¹³⁷ *Id*.

requirement from 100 square feet to 25 square feet and allowing CLECs to request space in minimum increments of 25 square feet. Reducing these standard space requirements and minimum increments will accommodate CLECs who require smaller collocation space, while ensuring that central office space is efficiently allocated and avoiding the problems created by offering space in non-standard sizes.

GTE also supports allowing CLECs to sub-lease portions of collocation cages.

As long as the original requesting party serves as a single point of contact, remains liable for payment to the ILEC, and is responsible for security within its collocation cage, sub-leased space within collocation cages should not impose additional burdens on ILECs. This approach may allow CLECs to structure more efficient collocation arrangements.

On the other hand, so-called "cageless" collocation arrangements without any physical separation between ILEC and CLEC equipment would be impractical and substantially increase the costs associated with collocation. Most importantly, "cageless" collocation raises substantial security concerns by opening access to the ILEC's facilities to other providers. Such open access is inconsistent with the Commission's conclusion in the *Local Competition Order* that reasonable security measures separating a competing provider's collocation space from an ILEC's facilities "protect both the LEC's and the competitor's equipment from interference by unauthorized parties." In that Order, the Commission also specifically rejected the

¹³⁸ See ALTS Petition, at 21 & n.38.

¹³⁹ Local Competition Order, ¶ 598.

suggestion that security measures only be provided at the request of the new entrant because "ILECs have legitimate security concerns about having competitors' personnel on their premises," and found that the "physical separation provided by a collocation cage adequately addresses these concerns."

The Commission's tentative conclusion that "carriers should be able to resolve any security concerns raised by cageless collocation" is misguided in several respects.

First, security measures – such as the required escorts, coded entry badges, or video monitoring systems suggested in the *NPRM* – each have their limits and fall short of the protection provided by physical separation.

For example, it simply is not feasible to guarantee that an escort could be available on demand, for any collocating party, given the number of collocating parties and central offices throughout an ILEC's operating territory. GTE has completed 110 collocation arrangements in 78 central offices in 16 states. Conceivably, GTE could be required to escort personnel from collocating CLECs virtually every day of the week. This does not even take into account the possibility of multiple visits per day and that fact that demand for visits will grow as collocation requests increase. Due to productivity gains over the past several years and vastly improved network reliability, GTE and other ILECs do not routinely deploy technicians in most central offices on a full-time basis. Thus, a simple-sounding solution such as escorts on demand really is entirely impractical.

¹⁴⁰ *Id*.

Similarly, a coded entry badge system is inadequate to fully safeguard ILEC's or other CLEC's equipment once a party has gained access to a central office. Such a system also may be ineffective in determining those responsible for any unauthorized action because the system can only determine that a particular badge was used to gain entry to the central office. It does not identify the individual who actually used the badge. This problem is compounded when two or more people are in the central office at the same time. If a network impairment occurs, the ILEC would have no means of determining which of the entrants (if any) might have caused the problem.¹⁴¹

Second, the proposed additional measures, assuming that they could provide the requisite degree of protection, each involve substantial upfront and ongoing investment of resources that would ultimately increase the costs associated with collocation. For example, a remote video monitoring system for a central office would entail providing controlled access to competitors' personnel, installation of video monitoring equipment, and integrating monitoring requirements with existing ILEC monitoring facilities that may be located hundreds or even thousands of miles away.

GTE, for example, has centralized all of its network monitoring functions. Even though it could be possible to establish localized centers designed specifically to monitor

¹⁴¹ In addition, although a coded badge security system will keep track of pertinent entry and, potentially, exit data (*e.g.*, name, badge number, time of day, date), there is an associated need for system controllers, data lines from all sites, and data base maintenance. In GTE's case, this would mean installing badge readers in, at a minimum, the 78 central offices where collocations cages currently are installed, with the potential for hundreds or even thousands of offices in the future. Each site will require a data line extending to the central monitoring location. Moreover, GTE would have no control over the use of CLEC badges or the timly notification of lost badges or badges requiring deactivation due to separation.

unauthorized intrusions, doing so would undermine GTE's highly effective Network Operations Center.

At first blush, it may be tempting to assume there are simple remedies to the problems of unfettered access to the ILEC's equipment area. However, upon evaluation, each such proposal has evident and substantial flaws. Quite simply, there is no reason to believe that such arrangements would be more cost-effective and less burdensome for all parties than constructing a cage or taking advantage of the shared collocation option.

Finally, even if the inherent deficiencies in these proposed remedies could somehow be overcome, the quintessential point remains that none of these options can prevent unintentional or intentional service interruptions. In every case, the ILEC may be able to determine the fault, if any, but it will always be after the fact. In the interim, customers will have experienced an unnecessary outage simply because regulators chose to override the very precautions that the public switched network has taken years to establish and maintain.

2. Third-party inspection of central office space availability would address CLECs' reasonable interest in verification. (¶ 146)

Under the Commission's current collocation rules, ILECs that deny requests for physical collocation due to a lack of space must provide the relevant state commission with a detailed floor plan or diagram of their premises.¹⁴² The Commission proposes to

¹⁴² 47 C.F.R. § 51.321(f).

augment this rule by requiring that an ILEC allow a competing provider to tour the ILEC's premises upon denial of a collocation request. GTE agrees that the Commission could give competitors the option to verify that collocation space in the ILEC's central office is indeed unavailable. However, allowing duplicative, individual tours of facilities would not limit CLECs' incentives to unnecessarily challenge ILECs' determinations regarding space exhaustion, and this approach would be unnecessarily burdensome for all parties.

Instead, GTE supports the verification proposal made by Pacific Bell to the California Public Utilities Commission. Under this approach, a CLEC would be permitted to request an independent, third-party inspection of an ILEC's central office where the ILEC claims that space is exhausted and the state commission has not already concluded that space is unavailable in that office. Where a state commission has made such a determination with respect to a particular location, its decision would be conclusive until there is a material change to the central office which creates additional space. To address subsequent requests, ILECs could certify that such changes have not been made. This proposal also provides that the costs of any third-party verification would be shared equitably between the parties based upon the results of the state commission's determination – namely the CLEC pays where the ILEC's claim of space exhaustion was confirmed by the state commission and the ILEC pays in those cases where the state commission disagreed with the ILEC's assertion.

¹⁴³ *NPRM*, ¶ 146.

Pacific Bell's proposal would benefit both ILECs and CLECs from several perspectives. First, it would encourage all parties to quickly address and resolve any potential dispute regarding collocation space by giving them the benefit of an independent and conclusive determination regarding the particular central office in question. Second, this approach would be less burdensome on all parties by eliminating unnecessary tours of locations and avoiding wasteful efforts where the state commission already has confirmed that space is exhausted. Finally, by allocating the initial costs of verification between the parties, the Pacific Bell approach would promote accurate reporting of collocation information and minimize any incentive to pursue unnecessary verification requests.

3. Information necessary for determining the availability of ILEC collocation space is readily available. (¶ 147)

GTE disagrees with the Commission's tentative conclusion that, upon request from a competing provider, "an incumbent LEC should submit to the requesting carrier a report indicating the incumbent LEC's available collocation space." The NPRM proposes that such reports should "specify the amount of collocation space available at each requested premises, the number of collocators, and any modifications in the use

¹⁴⁴ Not only would the requesting party benefit, but potential future requesters would know specifically whether collocation space was exhausted.

¹⁴⁵ *NPRM*, ¶ 147.

of the space since the last report" and describe the "measures that the incumbent LEC is taking to make additional space available for collocation." 146

Additional reporting requirements such as those proposed in the *NPRM* are unnecessary because the information required for CLECs to make informed decisions regarding collocation is available today from several sources. If a CLEC is interested in procuring collocation space in a GTE office, the CLEC submits a written request along with an application fee. Upon receipt of the request and fee, GTE surveys the office to determine whether space is available. If space is not available, the application is denied and the fee is returned. GTE makes this determination within 10 business days. At no expense to CLECs, a list of GTE central offices that can not accommodate additional physical collocation requests is included in its tariff on file with the Commission, which is now available in electronic format on GTE's Internet web site.¹⁴⁷

In addition, the Commission should not require ILECs to report data where there is no legitimate need for the information or where confidentiality concerns are implicated. For example, except to provide a CLEC with competitive information regarding other providers, it is not apparent why the number of collocators at a particular central office would bear directly on a CLEC's decision to collocate at that particular location. Requiring ILECs to report other types of information — such as disclosing plans regarding the future availability of collocation space — is inappropriate

¹⁴⁶ *Id*.

¹⁴⁷ GTE's tariffs showing the sites for which collocation space is not available can be found at http://www.gte.com/Tariffs/fcc.htm

because it would involve the release of proprietary and competitively sensitive information. As the Commission concluded in declining to adopt a requirement that ILECs file reports on the status and planned increase and use of space, "[s]tate commissions will determine whether sufficient space is available for physical collocation," and "[w]e expect individual state commissions to determine whether the filing of such reports is warranted." There is no basis for reversing this determination and imposing national reporting standards.

4. Rules governing allocation of site preparation costs and establishing national minimum site-preparation requirements are unnecessary. (¶ 143-144)

The *NPRM* seeks comment on ALTS's proposal that the agency "establish rules for the allocation of up-front space preparation charges." GTE's policy is to assess the up-front charges on the first CLEC seeking to collocate in GTE's central office. Subsequent collocators are assessed an appropriate proportional amount, with refunds given to the earlier CLECs. The process of negotiating these conditions is a better solution that a "one-size-fits-all" process that limits the flexibility of all parties.

Along similar lines, the Commission should not adopt ALTS's suggestion for national standards concerning the ordering and provisioning of collocation facilities within ILEC central offices. National standards in this regard would be impractical given the variations in local conditions among states and central offices within each state.

¹⁴⁸ Local Competition Order, ¶ 585.

¹⁴⁹ *NPRM*, ¶ 143.

For example, there are substantial differences between states' building codes and requirements, the conditions of specific central offices, and the availability of labor and materials to adequately prepare collocation space. Since set-up charges are a function of the location-specific costs, GTE necessarily has different set-up charges in different states. In this situation as well, private negotiations yield the most efficient and cost-effective outcome for both CLECs and ILECs because they allow the parties to consider these local factors and tailor the site-preparation requirements to the needs of the requesting party.

As explained above, the Commission's existing collocation rules are working well to promote the deployment of advanced services consistent with the goals of § 706. There is thus no need for a broad revision of these rules, and many of the Commission's specific proposals would raise substantial legal and policy concerns. Instead, GTE supports the specific changes discussed above as a means to give CLECs additional flexibility in seeking collocation space in ILEC central offices. In making such changes, however, it is important to allow ILECs to maintain the integrity of their networks and preserve the balance struck between the benefits for and burdens shared by all parties.

IV. THE COMMISSION'S EXISTING LOCAL LOOP REQUIREMENTS ARE SUFFICIENT TO PROMOTE THE DEPLOYMENT OF ADVANCED SERVICES. (¶¶ 154-176)

The Commission's existing local loop unbundling rules are fully adequate to assure fair advanced services competition. In the *Local Competition Order*, the

Commission identified the local loop as one of a number of network elements that ILECs must provide to competitors on an unbundled basis. The Commission defined the local loop to include "two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide services such as ISDN, ADSL, HDSL, and DS1-level signals." It also concluded that, to the extent technically feasible, ILECs must "take affirmative steps to condition existing loop facilities to enable requesting carriers to provide services not currently provided over such facilities." Now, as part of its evaluation of the availability of advanced telecommunications capability, the Commission seeks comment on whether it should revise its rules regarding the local loop. The agency asks, *inter alia*, whether it should establish additional national rules for local loops, Modify the definition of a local loop. And require sub-loop unbundling.

As discussed below, the Commission's current framework governing the provision of local loops is more than adequate to spur competition in the advanced

 $^{^{150}}$ Local Competition Order, \P 377.

¹⁵¹ *Id.*, ¶ 380.

¹⁵² *Id*., ¶ 382.

¹⁵³ NPRM, ¶ 151.

¹⁵⁴ *Id.*, ¶ 154.

¹⁵⁵ *Id.*, ¶ 164.

¹⁵⁶ *Id.*, ¶ 173.

services market. No additional rules are warranted.¹⁵⁷ The obligations imposed upon ILECs are clear: they must provide access to unbundled xDSL-compatible loops on a nondiscriminatory basis and, if technically feasible, condition loops to support digital functionality, such as ADSL.¹⁵⁸ Moreover, in its comments on the ALTS petition,¹⁵⁹ GTE committed to provide xDSL-conditioned loops in accordance with the terms and conditions of its interconnection agreements.¹⁶⁰ As part of its NASP proposal, GTE also is voluntarily willing to provide xDSL-conditioned loops, where technically feasible, regardless of whether it is in the market, as long as it recovers its actual costs of conditioning the loops. This voluntary offer of the Company, which is part of the total NASP proposal, should not be confused with the jurisdiction of the Commission to order GTE to take this action.

¹⁵⁷ The *NPRM* seeks comment on whether any of its tentative conclusions or proposals might affect existing interconnection agreements, existing state requirements, or pending state proceedings. (*NPRM*, ¶ 177). GTE opposes any rule that would permit a CLEC to abrogate an existing interconnection agreement or preempt any state requirements or pending state proceedings. CLECs and ILECs alike should be required to honor existing agreements until such time as they can be renegotiated. Moreover, the FCC is precluded from modifying any existing state-approved interconnection agreements. *Iowa Utilities Board*, 120 F.3d at 803-804.

¹⁵⁸ Local Competition Order, ¶¶ 377, 382. However, GTE supports the petitions for reconsideration filed by Bell Atlantic and SBC, which point out that the *Iowa Utilities Board* decision confirmed that the Commission lacks authority to require ILECs to provide "superior quality" network elements to competitors. This aspect of the decision is not part of the appeal before the Supreme Court. The reconsideration petitions therefore should be promptly granted.

¹⁵⁹ See generally Opposition of GTE, CC Docket No. 98-78 (filed June 18, 1998).

¹⁶⁰ GTE's support for the Bell Atlantic and SBC reconsideration petitions therefore is based on the over-reaching holding in the *Advanced Services MO&O* obligating ILECs to offer conditioned loops anywhere.

From the very beginning of the dialogue addressing advanced services, there has been an unwavering recognition that unbundled local loops capable of providing xDSL services must be made available to competitors as unbundled network elements. Each of the BOC petitions. ¹⁶¹ as well as GTE's ADSL tariff filling, ¹⁶² states unambiguously that loops conditioned to support xDSL will be offered as UNEs. Moreover, as the record demonstrates, both incumbent LECs ¹⁶³ and competing providers ¹⁶⁴ are aggressively moving forward in the deployment of advanced telecommunications capabilities. There is simply no reason to add more rules when the existing standards are adequate, and competition and innovation already characterize the market. Thus, to foster the widespread and timely deployment of advanced

(Continued...)

¹⁶¹ See Petition of Bell Atlantic Corporation for Relief from Barriers to Deployment of Advanced Telecommunications Services, CC Docket No. 98-11 (filed Jan. 26, 1998); Petition of U S WEST Communications, Inc. for Relief from Barriers to Deployment of Advanced Telecommunications Services, CC Docket No. 98-26 (filed Feb. 25, 1998) ("U S WEST Petition"); Petition of Ameritech Corporation to Remove Barriers to Investment in Advanced Telecommunications Capability, CC Docket No. 98-32 (filed Mar. 5, 1998); Southwestern Bell Telephone Company, Pacific Bell, and Nevada Bell Petition for Relief from Regulation Pursuant to Section 706 of the Telecommunications Act of 1996 and 47 U.S.C. § 160 for ADSL Infrastructure and Service, CC Docket No. 98-91 (filed June 9, 1998).

¹⁶² See GTE Telephone Operations Companies, GTOC Tariff No. 1, GTOC Transmittal No. 1148 (GTE DSL Solutions – ADSL Service), CCB/CPD 98-79 (filed May 15, 1998) ("GTE ADSL Tariff").

¹⁶³ For example, GTE has plans to deploy ADSL service in a substantial number of central offices. GTE ADSL Tariff, Description and Justification, at 1. BellSouth plans to bring ADSL service to 30 cities by the end of 1999. Comments of BellSouth Corporation, CC Docket No. 98-78, at 3 (filed June 18, 1998). In addition, U S WEST is currently rolling out advanced high-bandwidth copper-loop technologies throughout its 14-state territory. U S WEST Petition at 3.

¹⁶⁴ See ALTS Petition at 4

services and encourage continued innovation, GTE urges the Commission to avoid any further regulation.

A. Additional National Standards Governing The Provision Of Local Loops Are Simply Unnecessary. (¶¶ 154-156)

In the *NPRM*, the Commission asks to what extent it should establish additional national rules for local loops pursuant to §§ 201 and 251.¹⁶⁵ There is no need to create another set of local loop standards; the existing requirements are sufficient.¹⁶⁶ The market for xDSL and other advanced services emerged under the existing local loop rules and continues to grow. Further regulation could stifle the development of innovative solutions, slow competition, and deprive consumers of new advanced capabilities.

If the Commission nonetheless finds that additional federal rules are warranted, GTE suggests that the agency identify a range of acceptable outcomes. Doing so would preserve the ability of each state to choose what works best in light of the local characteristics of its market and the needs of competitors and consumers. As the Commission recognizes, "states should continue to have flexibility to adopt additional

^{(...}Continued)

¹⁶⁵ NPRM, ¶ 154.

¹⁶⁶ The *NPRM* asks whether the Commission should adopt any additional rules to aid enforcement of its local loop requirements. (*NPRM*, ¶ 156) As the Commission recognizes, sufficient formal complaint procedures already exist. See *Implementation* of the Telecommunications Act of 1996 – Amendment of Rules Governing Procedures to be Followed When Formal Complaints Are Filed Against Common Carriers, CC Docket No. 96-238, FCC 98-154 (rel. July 14, 1998).

requirements that respond to issues specific to that state or region."¹⁶⁷ Moreover, permissive guidelines would allow private parties to arrive at different, yet equally acceptable, solutions.

The Commission asks parties to comment on whether any existing state local loop regulations might serve as useful guidelines for national standards. GTE opposes elevating particular state requirements to a national standard. These requirements generally were developed in the context of negotiations or arbitrations involving specific parties and are based on the ILEC's specific network architecture and the interconnecting parties' particular needs. It is likely that a rule developed under such circumstances would ill-fit both ILECs and CLECs in other areas. Therefore, even if the Commission believes a certain state rule might make sense as a national requirement, it must first develop a complete record through a future rulemaking proceeding.

B. The Commission's Existing Rules Governing Operations Support Systems Are Sufficient To Ensure That Competitors Have Access To Necessary Information. (¶¶ 157-158)

The *NPRM* seeks comment on a wide range of issues concerning the ILECs' existing operations support systems ("OSS"). For example, the *NPRM* asks whether ILECs currently have a detailed inventory of existing loops; whether ILECs have

¹⁶⁷ *NPRM*, ¶ 155.

¹⁶⁸ *Id.*, ¶ 155.

¹⁶⁹ *Id.*, ¶ 157.

electronic access to such information; and if so, whether the same quality of access is being made available to new entrants.¹⁷⁰ The Commission also tentatively concludes that, "in order to satisfy the nondiscrimination requirements of the Act, competitive LECs should have access to the same electronic interfaces that are available to . . . ILECs to obtain loop information."¹⁷¹

Under the Commission's existing rules, ILECs must provide competing carriers with nondiscriminatory access to OSS functions for pre-ordering, ordering, and provisioning of loops. These rules ensure that CLECs receive the same treatment as ILECs. They do not, however, require any carrier to build and maintain a new database comprised of xDSL or any other specific loop capabilities. Imposing such an obligation would not only be contrary to the Act, but burdensome and costly. Even if statutorily permissible, the costs associated with the development of a new database research, development, manufacture, training, and maintenance – far outweigh the benefits.

It is also important for the Commission to recognize that loop inventory systems are not perfect. These systems will never achieve 100 percent accuracy when

¹⁷⁰ *Id.*, ¶ 158.

¹⁷¹ *Id*.

¹⁷² See Local Competition Order, ¶ 518.

¹⁷³ GTE is developing an interface (which will be fully capable in 1999) that will enable CLECs to access GTE data bases to determine the feasibility of offering xDSL services over a specific loop. This interface will permit CLEC to determine if the loops is xDSL-capable; it will not provide specific loop characteristics. This is the same information that GTE has available to itself.

compared with the realities of the field. Therefore, to ensure that a specific loop will support advanced data services, GTE requires a prior physical evaluation of any loop, both for its own advanced services and those of any CLEC purchasing the loop as a UNE.

C. The Commission's Loop Spectrum Management Rules Should Prevent Spectrum Interference And Protect Existing Services. (¶¶ 159-161)

The *NPRM* asks commenters to address any interference that may result from the provision of advanced telecommunications capability using different signal formats on copper pairs in the same bundle.¹⁷⁴ The agency also seeks comment on "ways to determine when a particular service, technology, or piece of equipment causes network interference such that use of the particular service, technology, or piece of equipment should be prohibited."¹⁷⁵ GTE is responsible for spectral compatibility of all services deployed in its network. To accomplish this task GTE establishes a site-specific spectral compatibility deployment guideline, based on existing technologies in the network and any new technologies being implemented.¹⁷⁶ This plan may be modified as standards for xDSL become formalized.

Although the ILEC maintains responsibility for the integrity of the network, competitors purchasing loops as UNEs must also be responsible for avoiding loop

¹⁷⁴ *NPRM*, ¶ 159.

¹⁷⁵ *Id.*, ¶ 160.

¹⁷⁶ GTE's positions in Sections IV.C and IV.D of these comments are supported by the Affidavit of Gary L. Sparks (Appendix 2 hereto).

spectrum interference when establishing or changing their customers' services on the loop. Inventory systems must be maintained to ensure that services, technologies, or pieces of equipment are assigned in a manner that avoids interference. To this end, any competitor seeking to purchase an xDSL-capable loop from GTE must clearly indicate that the loop is intended to provide xDSL service and identify the power spectral density intended for the service. Otherwise, a standard voice grade loop will be provisioned with no guarantee that it will support advanced data services.

While industry practices provide guidelines to avoid spectrum interference, practical application of these guidelines does not always avoid the problem. Advanced data services technology is progressing at rates that exceed the ability of standards bodies to keep pace. Each manufacturer provides technical specifications for its equipment that instruct users how to avoid problems such as spectrum interference. While most manufacturers extensively test their equipment to avoid these problems, no manufacturer can guarantee that every possible network or interface configuration has been identified. Before GTE standardizes any new equipment, further tests of network compatibility are conducted. It is only after GTE is satisfied that the manufacturer has addressed all open issues that GTE begins deployment of the equipment in its network or permits external equipment to interface with its network.

Even after these extensive compatibility efforts, there will be instances where new equipment causes unforeseen interference problems. Once GTE determines that

¹⁷⁷ The power spectral density ("PSD") is the transmission power level across the frequency range of the service being provisioned. It is necessary for the facility provider to manage PSD so as to avoid spectral interference.

the new equipment is the source of the interference, GTE is obliged to remove or deny service that creates spectrum interference problems for other customers. It is GTE's policy that new services that degrade the quality of existing service must be removed. The Commission should clarify that ILECs may properly resolve interference problems in this manner.

In its discussion of loop spectrum management, the Commission also asks "whether and how to grandfather existing technology that does not satisfy any new requirements." It suggests "riparian rights" as one approach. Under this approach, new users could not interfere with technology already deployed and would have to accept interference from the pre-existing technology. The Commission seeks comment generally on how it might best administer the grandfathering process. ¹⁷⁹

As a practical matter, all existing services should be grandfathered for the purpose of spectrum management. Incumbents and new entrants have established services in compliance with existing spectrum interference parameters. Competitors that wish to provision advanced services should not be permitted to compel incumbents or any previously established competitors to re-groom the existing plant. However, to the extent that ILECs rearrange plant to accommodate their new service offerings, they should accommodate the requests of CLECs as well. To the extent that CLECs desire the plant to be rearranged for their purposes, they should be required to pay for such rearrangements.

¹⁷⁸ *Id.*, ¶ 161.

¹⁷⁹ *Id*.

D. Spectrum Unbundling Is Not Required By The Act, Raises Significant Technical And Practical Difficulties, And Should Not Be Mandated. (¶ 162)

The *NPRM* invites comment on "whether two different service providers should be allowed to offer services over the same loop, with each provider utilizing different frequencies to transport voice or data." The Commission identifies various possible scenarios, including the situation in which a competitive LEC wants to "provide only high-speed data service, without voice service, over an unbundled loop." The Commission asks several questions, including: (1) "Should the competitive LEC have the right to put a high frequency signal on the same loop as the incumbent LEC's voice signal?" (2) "Should the competitive LEC be allowed to lease the loop for data services and resell the voice service of the incumbent LEC?" (3) "[W]hich entity would manage the frequency division multiplexing equipment if two carriers are offering services over the same loop?"

GTE opposes the type of "horizontal unbundling" of bandwidth described by the Commission above for several reasons. First, loop spectrum is not a network element under the 1996 Act. The Act defines a "network element" as "a facility or equipment used in the provision of a telecommunications service;" the term also includes "features, functions and capabilities that are provided by means of such facility or equipment,

¹⁸⁰ *Id*., ¶ 162.

¹⁸¹ *Id*.

¹⁸² *Id*.

including subscriber numbers, databases, signaling systems, and information . . . "183 This statutory definition makes clear that Congress rooted "network elements" in the <a href="https://physical.no.com/p

Spectrum plainly does not fall within Congress's understanding of a network element. Spectrum is the range of electromagnetic radio frequencies used in the transmission of sound, data, and television. It is not part of the physical infrastructure that comprises the incumbent's network; nor is it a feature, function, or capability. Thus, bandwidth is not subject to the unbundling requirements of § 251(c)(3).

Second, even if loop spectrum were a network element, which it is not, Congress expressly directed the Commission to "determin[e] what network elements should be made available" on an unbundled basis.¹⁸⁵ In addition, Congress set forth the specific criteria to be used in making this determination: (1) whether access to proprietary elements is necessary; and (2) whether the failure to provide access to a particular network element would impair the ability of the requesting carrier to provide service.¹⁸⁶ It is clear that Congress did not intend that the FCC require unfettered access to every possible network element. Rather, it injected a crucial component into the

¹⁸³ 47 U.S.C. § 153(29).

¹⁸⁴ National Communications System Technology and Standards Division, Telecommunications: Glossary of Telecommunications Terms (August 7, 1996).

¹⁸⁵ 47 U.S.C. § 251(d)(2).

¹⁸⁶ *Id*.